

NOVEMBER/DECEMBER 2023

**23PMB11 — GENERAL MICROBIOLOGY
AND MICROBIAL DIVERSITY**

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define animalcules.
2. What is ocular lens?
3. What is pleomorphic bacteria?
4. Define gliding bacteria.
5. What is epiphytic algae?
6. Define cosmopolitan distribution.
7. What is axenic culture?
8. Define disinfectant.
9. Define halophiles.
10. Define habitat.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Explain the scope of Microbiology.
Or
(b) Describe the principle and applications of dark field microscope.
12. (a) Give an account on distribution of fungi.
Or
(b) Write notes on actinomycetes.
13. (a) Describe the haplontic lifecycle in algae.
Or
(b) Explain briefly about the range of vegetative structure in phaeophyceae.
14. (a) Give an account of the radiation used in sterilization.
Or
(b) Comment on roll tube method of anaerobic culture.
15. (a) Define biodiversity. Classify the types of biodiversity.
Or
(b) Explain the adaptive mechanism of alkalophiles.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Give an account of the principle and instrumentation of electron microscope.
17. Define growth. Discuss the different phases of growth curve.
18. Write an essay on economic importance of algae.
19. Give an elaborate account on various mode of preservation of microbes.
20. Explain about extreme halophilic archea.
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